

**PART I Authorization to Operate**

- A. The permittee is authorized to operate Class V Injection Wells at the facility described in the permit application and in the cover page of this permit, in accordance with the provisions as set forth in this permit.
- B. Only the wastewater as described in the permit application shall be injected.
- C. This permit and the authorization to inject shall remain in effect until the expiration date stated on the cover page of this permit. If the permittee desires to continue injection past the expiration date of this permit, the permittee shall request a permit reissuance at least 180 days prior to expiration of this permit.

**PART II Construction Requirements**

- A. Injection Well Requirements
  - 1. Injection shall be via one or more of the injection wells proposed in the permit application or approved by the ADEM. To obtain the ADEM approval for construction and operation of auxiliary well(s), the permittee must provide the following 30 days prior to construction of the well(s):
    - a) a plan view of the site which shows the location of the well(s),
    - b) a sectional view of the well(s) which indicates the depth of the well(s) and how the well(s) will be constructed.
  - 2. The injection zones shall be the abandoned sections of the coal mine as described in the original permit application and in the applications for permit modifications dated August 22, 2004 and April 25, 2008.
  - 3. The permittee shall provide a means of sampling the wastewater being injected after treatment and prior to injection.
- B. Modifications

Approval by the ADEM shall be obtained prior to modification of any injection well or supporting surface. Modification shall mean any action that will change the configuration of the well beneath the surface, the methods of monitoring injection, or will result in injection of a fluid not specifically authorized by this permit.

### **PART III     Monitoring and Operating Requirements**

#### **A.     Injection Fluid**

1.     The permittee shall not inject any substance that is defined as hazardous or toxic by Federal or State laws or regulations or any substance not identified in the application for this permit. The proposed use of substances other than those identified in the permit application must be reviewed and approved by the ADEM prior to use.
2.     The permittee shall monitor the fluid to be injected as specified in Appendix A of this permit.
3.     The permittee shall not exceed the limits established in Appendix A of this permit.
4.     The ADEM may change the sampling requirements if the sampling data indicates a need to do so.

#### **B.     Monitoring Well**

1.     The permittee shall sample groundwater monitoring wells in accordance with the purpose of monitoring groundwater quality downgradient of the injection zone.
2.     All monitoring wells shall include the following.
  - a)     The annulus around the well casing above the well screen shall be sealed with bentonite to prevent the passage of surface water or injection field water.
  - b)     The surface installation shall include a concrete protective pad around the base of the well, a metal protective casing, and a locking cap.
3.     The permittee shall submit to the ADEM an as built description and a geologic log of the monitoring well within 60 days after drilling.
4.     All surface water shall be routed away from the monitoring well's surface installation.
5.     The monitoring wells shall be completed and sampled prior to injection into the expansion zone. The monitoring wells shall be sampled in accordance with Appendix B of this permit.

#### **C.     Operation**

The permittee shall adopt the following best management practices:

1.     Inspect terminal equipment, tanks, and chemical containers regularly for leaks.
2.     Calibrate treatment and application equipment regularly.
3.     Comply with Federal, State, and local solids and liquid waste disposal regulations.

## **PART IV      Records, Reports, & Submittals**

### **A.      Records**

1.      The permittee shall record the information listed below for all monitoring activities:
  - a)      The date, exact place, and time of sampling or sampling measurement(s);
  - b)      The name of individual(s) who perform the sampling or measurement(s);
  - c)      The date(s) analyses were performed;
  - d)      The name of the individual(s) who performed the analyses;
  - e)      The analytical or technical methods used;
  - f)      The results of each analysis performed; and
  - g)      The completed chain-of-custody forms for all samples collected.
2.      The permittee shall retain all records concerning the data used to complete the permit application, the operation of the wells, and the nature and composition of pollutants injected; to include records of the calibration of instruments, meters and gauges, quality control records, and recordings from continuous monitoring instrumentation; until at least three years after the closure of well(s).
3.      When requested by the ADEM, the permittee shall deliver to the ADEM copies of any of the records maintained in accordance with this permit.

### **B.      Reports**

1.      The permittee shall submit not later than 28 days after the reporting period, a monitoring report which shall include:
  - a)      The date and exact place, and time of sampling or sampling measurements;
  - b)      The name of individual(s) who perform the sampling or measurement(s);
  - c)      The date(s) analyses were performed;
  - d)      The name of the individual(s) who performed the analyses;
  - e)      The analytical or technical methods used;
  - f)      The results of each analysis performed; and
  - g)      The completed chain-of-custody forms for all samples collected.

2. The permittee shall report to the ADEM any of the following:
  - a) Any planned action which will change the use of the injection wells, will result in injection of a fluid different from that authorized by this permit, will change the method of operations of any injection well, or will change the method of the monitoring of well operations or injected fluids.
  - b) Any planned transfer of ownership of all or part of the permitted facility.
  - c) Any relevant facts of which the permittee becomes aware which should have been submitted in a permit application and any corrections to data previously submitted in a permit application.

3. Other Submittals

Studies, engineering reports, plans and specifications, plugging and abandonment plans, logging reports, and other technical documents submitted to comply with this permit shall be prepared by or under the supervision of qualified persons defined by Rule 6-8-.13 of the Underground Injection Control (UIC) Regulations of the ADEM.

**PART V Plugging and Abandonment**

- A. Within 90 days from the effective date of this permit, the permittee shall submit to the ADEM a Plugging and Abandonment Plan for approval. The most recent Plugging and Abandonment Plan submitted and approved by the ADEM is hereby made a part of this permit.
- B. The permittee shall submit to the ADEM an updated, well specific Plugging and Abandonment Plan within the 90 day period immediately following the termination of the useful life of any injection well and shall properly plug and abandon the injection well within 180 days of the ADEM approval of the plan.
- C. The permittee shall submit a report to the ADEM documenting the plugging and abandonment of any well within 30 days of the date that abandonment actions are completed.
- D. The permittee shall perform any abandonment and closure actions that may be required by the ADEM to remove a threat to groundwater quality or to the health of persons which is caused by the injection activity.

**PART VI Permit Modification, Revocation, Suspension, and Termination**

- A. The ADEM may impose emergency additional conditions to this permit when necessary to protect waters of the state from pollution. These conditions may include suspension of the permit to inject and shall remain in effect until the permit is modified, revoked, suspended or terminated in accordance with Rules 6-8-.12(a)3-5 and 6-8-.12(f) of the UIC Regulations of the ADEM.
- B. Non-emergency permit modification, revocation, suspension, and termination actions shall be accomplished in accordance with ADEM Administrative Code Rule 335-6-8.

**PART VII     General Provisions**

- A.     The permittee shall comply with all provisions of the UIC Regulations of the ADEM and shall comply with all provisions of this permit and shall reduce or halt injection if needed to maintain compliance with the permit and regulations.
- B.     The permittee shall comply with all applicable Federal and State hazardous waste management regulations.
- C.     The permittee shall allow members of the ADEM staff to:
  - 1.     Access property and records of the permittee for purposes of inspection.
  - 2.     Collect samples of the injected fluids, process and wastewater streams associated with the permitted injection wells.
  - 3.     Collect samples from any monitoring wells.
  - 4.     Obtain copies of records upon request.
- D.     The permittee shall immediately take all reasonable steps to minimize or correct any adverse environmental impact resulting from the operation of the permitted injection wells.
- E.     This permit does not convey any property rights of any sort, or any exclusive privilege.
- F.     The filing of a request by the permittee for a permit modification, revocation, and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- G.     Any noncompliance with this permit constitutes a violation of the Alabama Water Pollution Control Act and/or the UIC Regulations and is grounds for enforcement action such as permit termination, revocation, modification; or denial of a permit renewal application.

## APPENDIX A

The wastewater discharge shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTIC</u>	<u>UNITS</u>	<u>DISCHARGE LIMITS</u>	<u>MONITORING REQUIREMENTS</u>	
			FREQUENCY	SAMPLE TYPE
pH	Standard Units	6.0-9.0	Quarterly	Grab
Total Suspended Solids	mg/l	N/A	Quarterly	Grab
Total Dissolved Solids	mg/l	N/A	Quarterly	Grab
Specific Conductance	MHOS	N/A	Quarterly	Grab
Total Iron	mg/l	N/A	Quarterly	Grab
Total Manganese	mg/l	N/A	Quarterly	Grab
Volume Injected	Gals/day	N/A	Quarterly	Average

## APPENDIX B

Monitoring wells Well #7, Well B, Well #14, Well #15, and Well #16 shall be sampled as specified below:  
The dewatering well shall be limited and monitored by the permittee as specified below:

<u>GROUNDWATER</u> CHARACTERISTIC	<u>UNITS</u>	<u>DISCHARGE LIMITS</u>	<u>MONITORING REQUIREMENTS</u>	
			FREQUENCY	SAMPLE TYPE
pH	Standard Units	6.0-9.0	Quarterly	Grab
Specific Conductance	MHOS	N/A	Quarterly	Grab
Total Iron	mg/l	0.3*	Quarterly	Grab
Total Manganese	mg/l	N/A	Quarterly	Grab
Sulfate	mg/l	250*	Quarterly	Grab
TSS	mg/l	N/A	Quarterly	Grab
Depth to Water	ft	N/A	Quarterly	

\* If background concentrations of iron and sulfate in groundwater exceed the permit limits, the permit will allow the discharge to continue as long as the discharge does not cause a significant increase above background concentrations

## ADEM Permit Rationale

Date: November 13, 2009

Prepared by: Ruth Maxey

Permittee Name: Chevron Mining Inc

Facility Name: Chevron Mining-North River Mine 1

Location: 12398 New Lexington Road, Berry Area  
Fayette and Tuscaloosa Counties, Alabama  
Lat:N 33.613100/Long:W -87.606400  
Town 17S, Range 10W, Section5

UIC Permit Number ALSI9929374

Draft Permit is: Reissuance due to Expiration.

Injection Description: Wastewater resulting from the operation of a coal washing facility.

Discussion: Standard permit drafted.

1. No hazardous injection
2. Monitoring Wells required
3. Discharge and dewatering well must be sampled quarterly
4. Results must be submitted in a timely manner
5. BMPs required